Household Preferences for Healthcare Financing Mechanisms and Perceived Barriers to Effective Healthcare Financing in Southeastern Nigeria: Implications for Scaling Up Universal Health Coverage

Emmanuel K Nwala[1] [MSC], Comfort N Ogbuji[2] [Ph.D], Geoffrey C Nji[3][Ph.D], Ofuebe J I [4], [Ph.D], Anyiekere Morgan Ekanem (MPH,FMCPH) [5]

[1]Health Policy Research group, Department of Pharmacology and Therapeutics, College of Medicine, University of Nigeria, Enugu Campus, Nigeria

[2, 3, 4]Department of Health and Physical Education, University of Nigeria, Nsukka.

[5]Department of Community Medicine, University of Uyo Teaching Hospital, Uyo-Akwa Ibom State.

Abstract: ***Introduction**: A number of reports in Nigeria and other African countries have noted that there have been extensive debates about moving away from out of pocket payments for healthcare to social health insurance mechanisms. However, there is little knowledge about what mechanisms the households would prefer for financing healthcare and what may pose barriers to effective care financing. This paper hopes to fill the gap in knowledge. **Methods**: The study was a cross-sectional household survey of urban dwellers in Enugu, southeast Nigeria. Data on socio-demographic, preferences for health care financing, and perceived barriers to effective health financing was collected from heads of households or their surrogates. Descriptive statistics was run for all the variables. **Results**: The households preferred mostly National health insurance scheme [NHIS] [45.1%], out of pocket [28.2%] and community based health insurance scheme [14.1%]. Income, decreased quality of care, incomplete coverage and unemployment were the perceived barriers to effective care financing in the study area. **Conclusion**: This study provides evidence that households preferred risk pooling mechanisms for financing healthcare which have elements of cost sharing. There should be efforts to popularize such schemes/or mechanisms, and since such mechanisms protect the poor, effort should be made to scale it up to reach larger population especially the informal sector and unemployed masses in Nigeria.*

Keywords: Healthcare financing, household preference, payment, pament mechanism, universal health coverage, out of pockect expenditure, national health insurance scheme, community based health insurance

1. Introduction

Over the years, there have been changes in the way healthcare is financed [1-6]. Individuals and households have also financed their healthcare needs through range of means [4]. Even though the adoption of any financing mechanism to reduce catastrophic cost is a function of the government [7-8], strivings for universal coverage has made it possible that different financing mechanism has evolved [9].

Funding healthcare in Nigeria is from a variety of sources that include budgetary allocations from Government at all levels, loans and grants, private sector contributions and out of pocket expenses. Some of these mechanisms are individual based options [10] while some are collective [11] and may pool more risk more effectively than others. There is a more universal option such as insurance mechanisms that can pool large risks [12-15] and ensure that individuals are protected financially [4, 16, 17].

However, any financing mechanism to be adopted by individuals, households, and / or government must be one that meets the healthcare financing functions of the health systems as set by the World Health Organization [18-19]. These financing functions include revenue collection, pooling of financial and health risks, and purchasing of healthcare.

A number of reports in Nigeria and other African countries have noted that there have been extensive debates about moving away from out of pocket payments for healthcare to social health insurance [20-21]. This resulted from evaluated effects of user charges which have evidently rendered many households catastrophic [22-24]. Worse still, studies have noted that more than half of the spending in poor countries comes from out-of-pocket payments by consumers of care—a highly inequitable form of financing because it hits the poor hardest and denies all individuals the type of financial protection from the costs of catastrophic illness provided by public and private insurance mechanisms [10, 25]. In addition, most poor countries are unable to provide their citizens with a basic package of essential health services. These and many other necessitated the institution of national health insurance in Nigeria [26, 27], even though coverage have been very poor in Nigeria [28- 29] when compare to other West African Countries such as Ghana [30].

Evidence shows that national insurance scheme in Nigeria benefits only federal formal sector workers [27], of which

Licensed Under Creative Commons Attribution CC BY

access is still poor. Studies from other countries have indicated that people in the formal sector are generally more financially secure on average, and also more easily organized into health insurance schemes since their income is readily identified and can often be taxed at source. Indeed, the size of the formally employed sector, and its rate of expansion or contraction have been cited as important background factors in the success or demise of national health insurance schemes [31-32]. It is worth mentioning that formal sector comprises of enterprises which are registered and whose employees earn regular salaries and wages [33].

Some states in Nigeria such as Cross River, Enugu and Bauchi have adopted the national health insurance scheme though implementation is poor, while in some states, adoption is still underway. Reports also indicate that communities are happy with community based insurance scheme, and that people would be willing to pay for community based health insurance and that it is feasible [34-35]. There are no doubts that such mechanism of insurance would reduce burden of payment for healthcare as placed especially on the poor and as evidence from other countries shows [25].

Efforts to ensure universal coverage for healthcare are being impeded by a couple of factors related to economic and organizational factors [36]. The government is faced with various challenges beginning from a stagnant mono-cultural economy that depends on crude oil as a single export commodity, a rapid population growth, political instability and high rate of unemployment. Reports have indicated that interventions to communities should be from their perspective or reflect their preferences.

Before the debate for the for universal coverage, the adoption of user fees as a cost recovery strategy by health care providers caused considerable negative impact on equity and access to health care [37]. User fees are defined as amounts levied on consumers of government goods or services in relation to their consumption, or the amounts of money levied on individuals for the use of goods and services from which they receive 'special benefits' (38). This mechanism of paying for healthcare may impose a heavier burden on the poor who are most likely to face a higher burden of disease [39-40].

Establishing household preferences for health care financing mechanism would inform the government on approaches that would benefit the poor and suit consumer needs. However, there is little knowledge about what mechanisms the households would prefer for financing healthcare and what may pose barriers to effective care financing. This paper hopes to fill this gap in knowledge.

2. Methods

2.1 Study Area

This study took place in Enugu urban, southeast Nigeria. Enugu urban is the capital city of Enugu state, with a population of 1,596,042 males and 1,671,795 females according to the 2006 national population census results. It comprised of Enugu north and parts of Enugu south and east LGAs. It houses about four public tertiary health institutions, good numbers of private hospitals [both specialist and non specialist] and primary health centers, and large number of drug retailers [pharmacies and patent medicine] spread all over the place. There are also good road network in the urban area,an indication of physical access to the health facilities in all seasons of the year. Enugu urban is also known to be the headquarters of the southeastern states. The city is quite urbanized with numerous educated public and a good proportion are traders. The Enugu state health system is decentralized [district health systems], and there is free maternal and child health care all over the city. There are four universities out of which one is federal, another is a state owned while the other two are privately owned. There are also two (2) privately owned polytechnics, a federal and a state school of nursing and midwifery.. These educational institutions in the city predicate that large number of the poulation would be literate. The people of Enugu urban love christainity mostly, though there are few mosques around.

2.2 Study Design

The study used a descriptive cross sectional design involving 142 households in Enugu South LGA – Enugu urban between September and December 2011. Simple random technique by balloting without replacement was used to select the study participants. Heads of households or their surrogates as the case may be were interviewed using a pre-tested interviewer-administered questionnaire. Informed consent of the survey participants was sought and duly documented [written]. Information sheets containing facts were given to the respondents and allowed them some time to read and understand the purpose of the interview. Socio-demographic characteristics of the households, preferences for health care financing mechanisms and perceived barriers were determined in the study. Descriptive statistics was calculated for all the variables.

2.3 Ethical Consideration

The protocol for the study was reviewed by the Department of Health and Physical Education, University of Nigeria, Nsukka**.** Informed consent of the survey participants was sought orally and duly documented [written]. Information sheets containing facts were given to the respondents and allowed them some time to read and understand the purpose of the interview. All risks and benefits of the study was first explained to the respondents and later handed to him/her. The respondents were allowed to pull out of the interview at will. Only respondents who formally consented to the interview were included in the study while those who did not consent to the interview were excluded in the interview.

2.4 Data Collection and Analysis

Interviewers were trained to collect data from the household heads or their surrogate as the case may be. The data was filtered and entered into the Epi Info statistical software and analyzed with statistical package for social sciences [SPSS]. Descriptive statistics was run for all the variables.

Licensed Under Creative Commons Attribution CC BY

3. Results

3.1 Socio-demographic Characteristics

Majority of the study participants were heads of households [72.5%], aged 23-65years[X=38.1786], married [71.1%] females [53.2%), and formal sector workers [49.3%]. The household population was grouped into the following age groups; under 5 years, 6-17years, 18-60 years, and above 60 years respectively. The total mean and median ages were 7 and 5.4 [SD-29.8], while 18-60yrs age group has the mode [3.00]. The mean number of persons per household was 5.9, and most of the study participants were tertiary scholars [84.5%] who had spent at least 16 years in school.

3.2 Preferences for Financing Mechanisms

National health insurance scheme [NHIS] [45.1%] was the mostly preferred option for financing health care, followed by out of pocket [28.2%]. However, other options were identified including community based health insurance scheme [14.1%], donor funding [2.8%], exemption fees [2.1%], taxation [1.4%] and others which the respondents indicated that there should be a separate fund financing health care.

3.3 Reasons for Preferred Options

The study revealed the following reasons for participants preferred option of health care financing. Most [45.1%] of the people expressed their preferences for NHIS for the reasons that *''it is a government intervention, government gives a discount of 10%' and treatment is done at a subsidized rate'*. For those that prefer Community Based health insurance, their quoted reasons were because the community assists in footing the bill and because the community leaders assist/participate in the organization. Community participation in the organization is a factor proven to be responsible for the success of most community programs. However, some participants preferred out of pocket expenditure because they receive immediate treatment, by propelling the doctor to take actions.

3.4 Barriers to Effective Health Care Financing

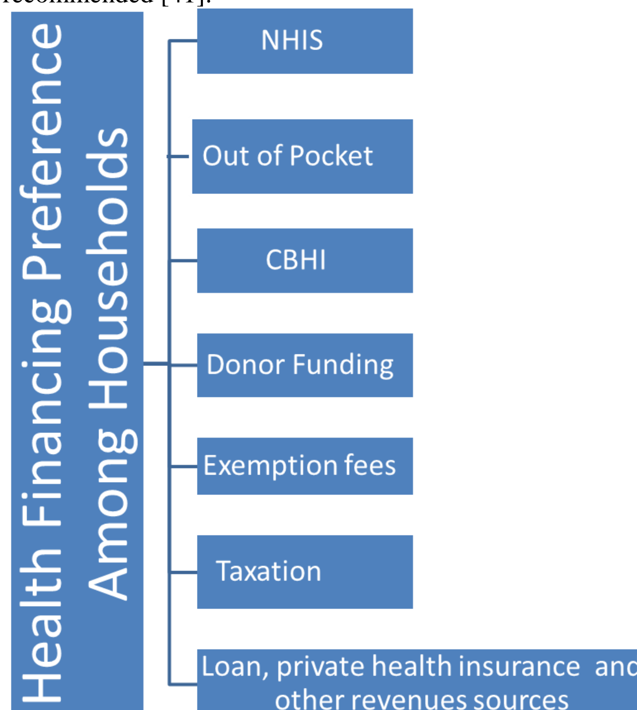
Of the 142 households surveyed, 85 [59.9%] of them perceived barriers to effective care financing in the study area. Of this group, 44% perceived income as a barrier, quality of care was perceived as a barrier by 31.5% while incomplete coverage(11.3%), unemployment(10.6%), benefit packages (3.8%) and incentive providers (1.4%) respectively were the other perceived barriers mentioned .

4. Discussion

It is known that heads of households play major roles in paying for health care and in taking other decisions about health seeking behavior. Women also are primary care givers and in this study majority of them participated. This finding implies that health care financing interventions such as uptake of risk pooling mechanisms [for example, national health insurance scheme, community based health insurance scheme and any other risk pooling mechanism that ensures universal health coverage] should target household heads since they are key community leaders and are in positions to pay for health care services. In addition, community advocacy and sensitization activities should target women societies because they are also key influencer and often seek health care more than men. Targeting community advocacy and mobilization activities on women may yield more result because they are the primary caregivers and are most often available at home for health care interventions.

The average household size in the study area was 5.9 persons per household, a figure higher than the 4.6 mean number per household(4.9 in rural and 4.2 in urban area) reported by the National demographic and health survey 2013. This implies that many of the households in the study area were densely populated and has a lot of implications for health care utilization especially paying for health care services per household. This study also found that greater proportion of the households was between the age group of 18-60 years. This also has lot of implications since this population group constitutes the workforce, and it may be easy to sensitize, convince and organize them into universal health coverage schemes.

There was preference for National Health Insurance Scheme [NHIS] more than any other mechanism of funding health care This calls for the urgent need for the adoption and implementation of health insurance scheme for the state government workers as it may be easy to organize them in to insurance by deducting their contributions from the monthly income. This finding highlights that NHIS should be made mandatory for the state formal sector as a related report has recommended [41].



Other cost sharing options like community based health insurance scheme as found in the study should be explored, as this study indicates that people would prefer this especially because community solidarity and participation in the scheme. However, CBHI is a component of NHIS especially for those that are not into formal sector jobs like

Licensed Under Creative Commons Attribution CC BY

the rural dwellers, market men and women, farmers, artisans and other groups. There is no doubt that it will work as reports in other settings in Nigeria and Vietnam have indicated that benefactors were happy with the scheme [22, 42]. The reported percentage preference in this study may indicate poor knowledge of CBHI among the respondents and other community dwellers. This then suggests that for any nation to drive universal health coverage, strategies to massively advocate and sensitize communities and groups on the role of CBHI in ensuring universal access to care should be deployed. This is because since CBHI is a voluntary mechanism, willingness to enroll into the scheme may largely depend on the level of individual knowledge, advocacy and sensitization strategies among other factor.

There is increasing concerns that out of pocket expenditures as preferences in this study may translate to practice. Although it has its own advantages, not every household may be comfortable with the mechanism and as such, may not ensure financial risk protection. There should therefore be public enlightenment campaign to educate people about ill-effects of out of pocket expenditures and the need to adopt risk sharing mechanisms of health insurance scheme which would protect households. Since the option propels providers to prompt action, there should be efficient provider incentives that will work well to make them move away from out of pocket services to risk pooling mechanisms. Universal health coverage may be far from reaching if out of pocket methods are not eliminated because the poor and very poor would not be protected and may likely avoid accessing care due to inability to cope with payments.

A lot of factors seem to pose barriers to effective financing mechanisms. For example, income, cost, decreased quality of care, unemployment and incomplete coverage of social insurance mechanisms. Factors related to decreased quality of care and incomplete coverage of social insurance mechanisms may inhibit trust and confidence of the community members in the functionality of effective health financing models that can ensure universal health coverage.

These issues need to be addressed as NHIS is at its adoption phase in the study area so that strategies would be put in place to overcome impediments to effective implementation of the scheme. However, the study identified incentives to providers as one major barrier to effective health financing. This may indicate that providers could be attracted into risk pooling mechanisms due to incentives. Benefit package was also identified as a barrier. It is a matter of concern because individuals are likely not to take up financing mechanisms that are not comprehensive in terms of meeting their need. This suggests that insurance schemes, government, health management organizations should be holistic in designing their benefit packages especially for voluntary health financing models.

5. Conclusions

This study provides evidence that households preferred risk pooling mechanisms for financing healthcare which have elements of cost sharing. There should be efforts to popularize such schemes/or mechanisms, and since such mechanisms protect the poor, effort should be made to scale it up to reach larger population especially the informal sector and unemployed masses in Nigeria. It is also recommended that donor aids for health care delivery in southeast Nigeria should prioritize for health care financing mechanisms that could drive health for all.

6. Limitations of the Study

The study sample was small [142] households and so there should be caution in generalizing the findings. The study was conducted in the urban area where most of the people may be aware of debates on issues of health insurance schemes and drive for universal health coverage. So on a larger scale, the study should be conducted in the rural settings where majority of the poor live to also elicit community preferences.

7. Conflict of Interest

The authors declare that there is no conflict of interest

References

[1] Pomatto V. Camino C Uzochukwu BSC. External review of prime - partnership to reinforce immunization effieciency. External eu-prime review final report - contract n. 2008/166761-version 2. 2009

[2] Increasing Non- State Actors' Implementation and Development Expertise. Presented, discussed and amended at the Induction meeting 8-12 may 2009. http://insidenigeria.org/documents/1256024461inside_manual.pdf.Assessed 23/07/2011

[3] Draft of Nigeria National health Bill 2010. Federal Republic of Nigeria

[4] Weber, Stierle, Hohmann, Schramm, Schmidt-Ehry, Holst: Social Protection in Health Care - European Assets and Contributions *ESCHBORN 2005*

[5] CREHS Capacity development and final report 2010. www.CREHS_abridged_final_report_annex7.pdf. Assessed 22/08/2011

Licensed Under Creative Commons Attribution CC BY

[6] James C , Hanson K, McPake B, Balabanova D, Gwatkin D, Hopwood I, Kirunga C, Knippenberg R, Meessen B, Morris SS, Preker A, Soucat A, Souteyrand Y, Tibouti A,

[7] Villeneuve P and Ke Xu.To retain or remove user fees? *Reflections on the current debate*.http://www.ungei.org/SFAIdocs/resources/To_Remove_or_Retain_User_Fees.pdf. Assessed 12/08/2011

[8] *McIntyre* D and Gilson L. Reclaiming financial resources for public sector health services. Regional network for equity in health in east and southern Africa (EQUINET) 2009 www.equinetafrica.org. Assessed 21/08/2011

[9] Charlotte Zikusooka, Patrick Tutembe and Mark Tumwine. Assessment of health care financing in Uganda: Equity issues. 2010 http://www.dfid.gov.uk/r4d/PDF/Outputs/Equitable_RPC/CRHES_abridged_Final_Report_Annex7.pdf. Assessed 12/08/2011

[10] Masiye F and Chitah BM. Towards universal access: From targeted exemptions to user from removal in Zambia. *EQUINET 2009*

[11] Gottret P and Scheiber G. 2006. Health care financing revisited: A practitioner's guide. *Worldbank.*

[12] WHO. Mobilization of Domestic Resources for Health. The Report of Working Group 3 of the Commission on Macroeconomics and Health. World Health Organization Geneva 2002

[13] World Health organization. Mental health financing. Mental health policy and service guidance package. *World Health Report.2003*

[14] Murray CJL and Frenk J. A WHO Framework for Health System Performance Assessment. Evidence and Information for Policy. http;//www.HSR1.who.int.com. Assessed 12/08/2011

[15] WHO. Tax-based health financing for health systems: Options and experiences discussion Paper. *Department "Health System Financing, Expenditure and Resource Allocation" (FER)Cluster "Evidence and Information for Policy" (EIP.)2004*

[16] World Health Organization. Social Health Insurance. Report and Documentation of the Technical Discussions held in conjunction with the 40th Meeting of CCPDM. World Health Organization Regional Office for South-East Asia, New Delhi September 2003

[17] Nicolau D and Mertens F. Evaluation of status of implementation and progress achieved in the rural component of the water supply and sanitation sector reform programme (WSSSRP) "*Contract number 2007/146332 of the Framework Contract Beneficiaries EuropeAid/119860/C/SV/multi* ". *5 May 2008.* http://medind.nic.in/haa/t08/i1/haat08i1p62.pdf. Assessed 12/08/2011

[18] Gilson L, Kalyalya D, Kuchler F, Lake L, Oranga H, and Ouendo M. Strategies for promoting equity: experience with community financing in three African countries. *Health Policy 58 (2001) 37–67*

[19] World Health Organizatiosn. The World Health Report 2000: Health Systems: Improving Performance. Geneva. *World Health organization 2000*

[20] Carrin G and James C. Social Health Insurance, Design, performance and implementation issues. *Presentation made at Regional Consultation on Social Health Insurance, 7-9 July 2003, Bangkok,Thailand 2005*

[21] Bennett S and Gilson L. Health care financing: designing and implementing pro-poor policies. 2001www.healthsystemrc.org. Assessed 24/8/2011

[22] WHO. Nigerian farmers rejoice in pilot insurance plan**.** *Bull World Health Organ 2010;88:329–330 | doi:10.2471/BLT.10.030510*

[23] Ilya Litvak. User fees as a form of cost sharing in developing world. http://www.mphp439.user_fees1.pdf. Assessed 14/08/2011

[24] Frank Nyonator and Joseph Kutzin. Health for some? The effects of user fees in the Volta Region of Ghana. *Health Policy and Planning;2010* ***14****(4): 329–341. http://heapol.oxfordjournals.org*

[25] Araoyinbo ID and Ataguba JE. User charges in Africa:form theory and evidence, what next?

[26] **An Essay Submitted To The African Health Economics And Policy Association** (*AFHEA) 2008. http://www.araoyinbo_atguba_userfeersafrica.pdf. Assessed 28/08/2011.*

[27] McIntyre, D. Learning from experience: Health care financing in low- and middleincome

[28] countries, *Geneva: Global Forum for Health Research 2007*

[29] Lambo E. Memorandum from the honourable minister of health on a blueprint for the accelerated implementation of national health insurance in Nigeria. 2004

[30] Federal Ministry of Health. Nigerian health system assessment. **Federal Republic of Nigeria2009.** wSww.healthsystems2020.org

[31] Nigeria Health Watch. What hope for the National Health Insurance Scheme in 2010. *http://www.nhis.gov.ng*

[32] Onwjekwe O. Onoka C. Uguru N. Tasie N. Uzochukwu B. Eze S. Kirigia J ans Petu A. Preferences for benefit packages for community-based health insurance: an exploratory study in Nigeria. *BMC Health Services Research* 2010, **10:**162doi:10.1186/1472-6963-10-162

[33] Witter Sophia and Bertha Garshong**.** Something old or something new? Social health insurance in Ghana. *BMC International Health and Human Rights* 2009, **9:**20doi:10.1186/1472-698X-9-20

[34] Perker D and Feacham S. 1995. Community and private [formal and informal] sector investment in health. *www.gdrc/uen/waste*

[35] World Health. 1995. *Ethiopia: public expenditure policy for transition report.* Washington, DC, World Bank, 1994, 12992-ET. World Bank. *World development report. Workers*

[36] Federal Ministry of Health 2004. *Healthcare in Nigeria.* Annual Bulletin of the Federal Ministry of Health. Abuja, Nigeria.

[37] Onwujekwe O, Onoka C, Uzochukwu B, Okoli C, Obikeze E and Eze S. Is community-based health insurance an equitable strategy for paying for

Licensed Under Creative Commons Attribution CC BY

healthcare? Experiences from southeast Nigeria. *Health Policy* 92: 96-102, 2009. [2]

[38] Onwujekwe O, Okereke E, Onoka C, Uzochukwu B, Kirigia J, Petu A. Willingness to pay for community based health insurance in Nigeria: do socio-economic status and place of residence matter. *Health Policy and Planning*. Published October 26 2009. doi doi: 10. 1093/heapol/czp046 [2]

[39] Onwujekwe O, Onoka C, Uzochukwu B, Obikeze E and Ezumah N. Issues in equitable health financing: socio-economic and geographic differences in households' illness expenditures and policy makers' views on the financial protection of the poor. *Journal of International Development*, 21(2): 185-199, 2009. [2]

[40] Oladimeji O. Health promotion in primary health care in Nigeria. *The Health Watch* 2009

[41] Duff AG. 2004. Benefit taxes and user fees. *University of Toronto Law Journal.*

[42] Nyanator K and Kutzin D. 1999. User fees in Africa: From theory and evidence. *www.who.int/entry/alliance*

[43] Gilson L. The lessons of user fee experience in Africa, *Health Policy and*

[44] *Planning* ,1997. 12(4): 273-285.

[45] Preker AS and Velenyi EV. Government-Run Mandatory Health Insurance in West Africa: Opportunities and Constraints. *Worldbank. 2005*

[46] Vietnam Social Security. Community based health insurance and school health insurance schemes in Vietnam. http://www.vss7communitybasedinsurance.pdf. Assessed 27/08/2011

Nigeria Assessment
Nigeria Healtresultsh System Assessment 2008RE
Appendix Results

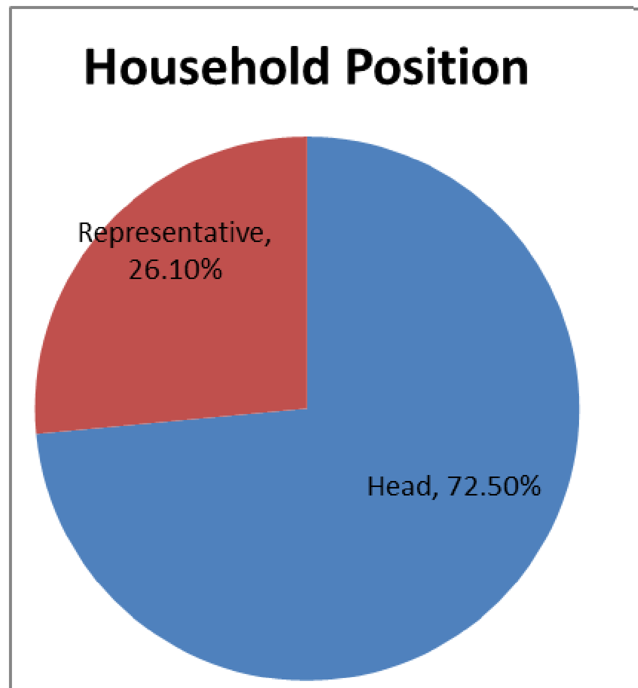


Figure 1: Household Position

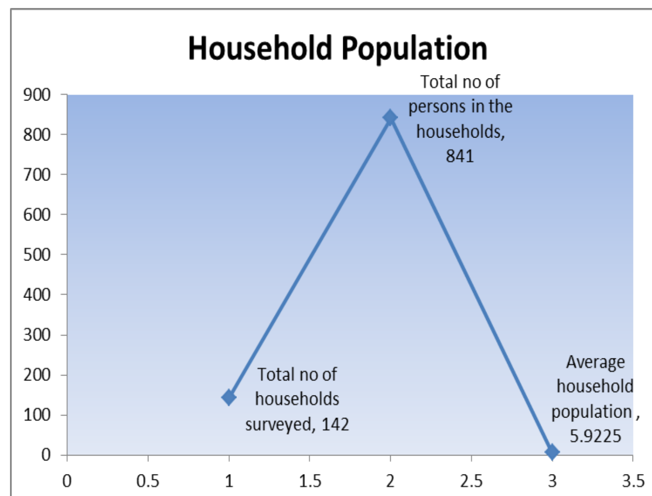


Figure 2: Household Population

Licensed Under Creative Commons Attribution CC BY

Table 1: Participants Age

Age Range	Mean ages	Median ages	Mode
23 -65	38.1786	38.0769	25

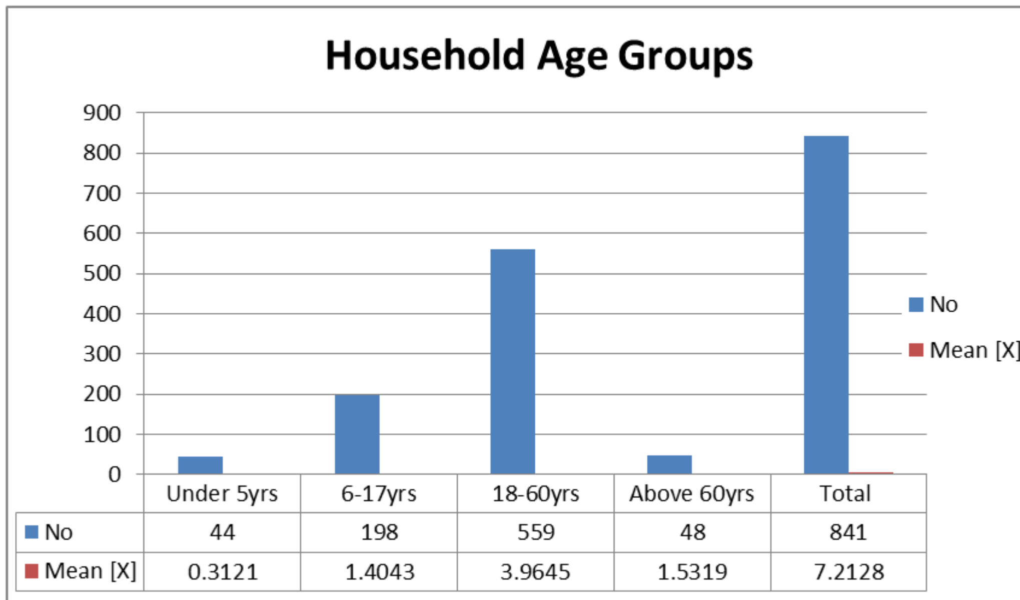


Figure 3: Household Age Group

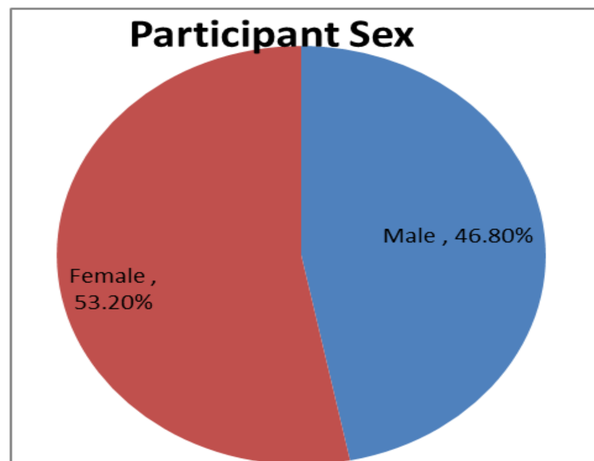


Figure 4: Participant Sex

Table 2: Participant Total School Years

	Mean	*Median*	*Mode*
Total school period in years	16.2979	17.0000	16

Licensed Under Creative Commons Attribution CC BY

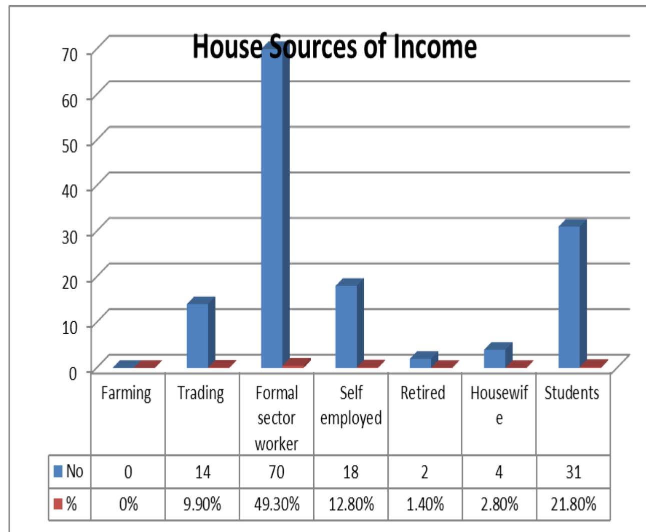


Figure 5: Household Sources of Income

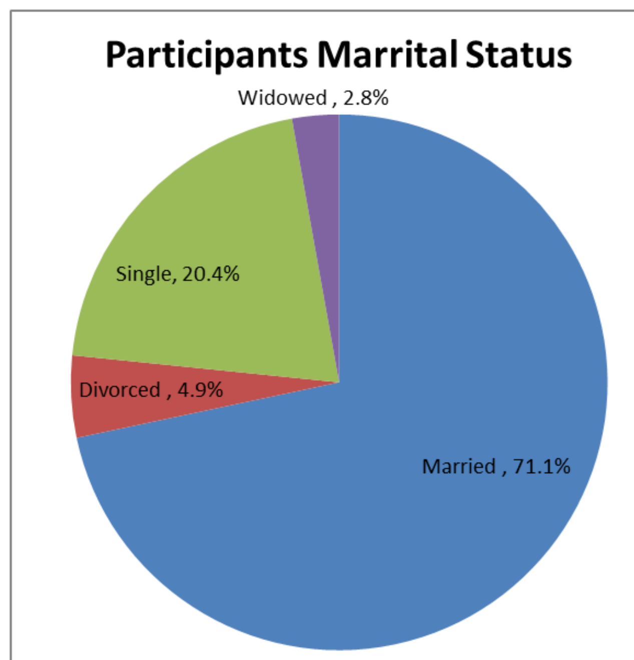


Figure 6: Participants Marital Status

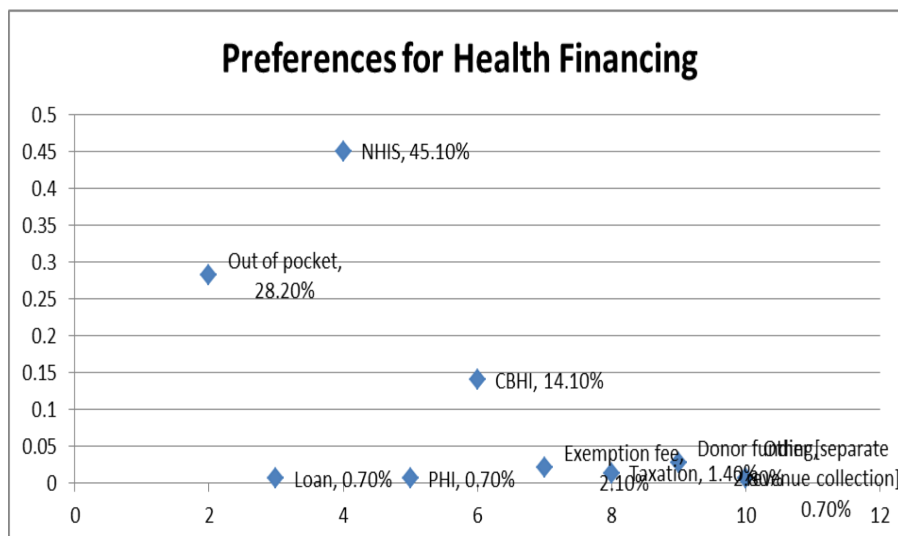


Figure 7: Preferences for Financing Health Care

Licensed Under Creative Commons Attribution CC BY

Reasons for Preferred Options

From the study, a lot of reasons were given for the preferred options. Most [45.1%] of the people expressed their preferences for NHIS and below are some of their quotes:"***because it is government intervention and government gives us 10% discount and ."because one is treated at a subsidized rate".***

Some who said they prefer Community based health insurance quoted as follows; "***because the community assist in footing the bill, and because the community leaders assist in the organization".***

However, the participants preferred out of pocket expenditure because***..."one receives immediate treatment, by propelling the doctor to commence immediate treatment".***

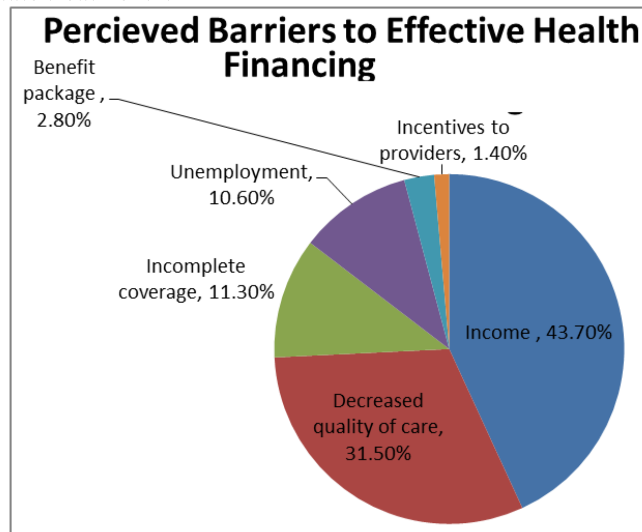


Figure 8: Barriers to Effective Health Care Financing

Licensed Under Creative Commons Attribution CC BY